ABSTRACT OF THE DISCLOSURE

A scheduler and method for use in packet communication systems apply a generalized discrete-rate scheduling technique which removes the limitation of the linear increase in sorting complexity with the number of supported service rates. The set of supported service rates may

5   be increased without increasing the number of timestamps that need to be sorted. Conversely, the generalized discrete-rate scheduler supports a given number of service rates using a smaller number of rate FIFO queues, thus further reducing complexity. Such improved performance is achieved by splitting, for scheduling purposes only, a connection or session into multiple sub-connections or sub-sessions. The technique can be applied to per-connection-timestamp and no-

10   per-connection-timestamp discrete-rate schedulers, as well as to any other discrete-rate scheduler.